Amendments to the Specification

Please replace the paragraph at page 19, lines 20 through 29 with the following amended paragraph:

Various optical modulations can be used with pilot tones. In the current embodiment, on-off keyed data operates with the pilot tone. Fig. 8 includes timing diagrams of logic signals transmitted across optical transmission path 120. An idealized mathematical representation of the intensity of the optical signal effected by Fig. 8 is

$$I(t) = Pave * (2 * D(t)) * (1 + M * \sin(2*PI*Fp*t)),$$

where I(t) is the optical intensity of the composite optical signal as a function of time t is a time in seconds. D(t) represents a random bit stream carrying network revenue traffic, taking on values of + 1 or 0, such that the time average value of 2 * D(t) = 1, Pave represents the time average optical power or intensity in watts, M is the modulation index, PI = π = 3.14159, and Fp is the pilot tone frequency in Hz.